



■ **ACSOON GPU400L** series AC Power Supply is one of the most popular 400Hz static frequency converter, which is designed to change Mains electricity 50hz/60hz power to 400Hz aircraft power. It is one of ideal external power supply for aircraft engine start and aerospace equipment ,with compact size and higher reliability. ACSOON GPU400L series widely used for aircraft daily test and maintenance, it can be installed under the passenger boarding bridge or placed on a ground pedestal, offering flexible installation options.

■ **ACSOON GPU400L** delivers three phase 115V/120V 400Hz aircraft power with clean sine wave output, and excellent voltage stability in line and load regulation, high efficiency and low harmonic distortion.

Main Features

- 10 events memory stores
- Pure sine wave, sinusoidal output
- Simple and quick on-site installation
- Interlocked function to guarantee aircraft power safety
- Eco-friendly, lower power consumption with high efficiency
- Self diagnose system which would show error code on digital display
- Auto voltage compensation system, ideal voltage at aircraft connector
- Completely protection and alarm for over voltage, over current and overheating, etc
- Intelligent cable reel speed control with automatic retraction and extension at the cable end, enabling fast and efficient operation
- The 400Hz output cable has integrated control wires for operation of the Power Coil from cable drum via the aircraft connector push buttons / LED indicators

ACSOON® GPU400L series 115V 400Hz AC power supply is available with the following capacities:

- Three phase AC output: 30kva, 45kva, 60kva, 90kva, 120kva, 180kva

BRIDGE-MOUNTED UNIT STATIC FREQUENCY CONVERTER

GPU400L SERIES

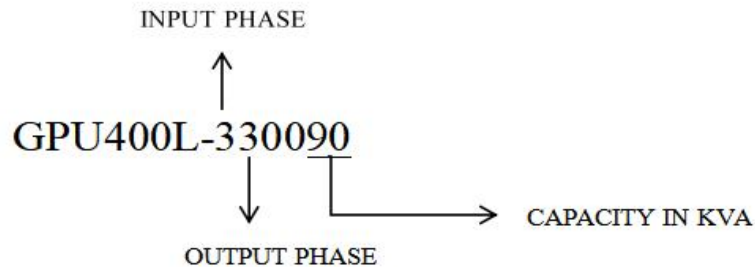
ACSOON POWER SOLUTIONS' PROVIDER

ACSOON GPU400L Series Specification Data sheet

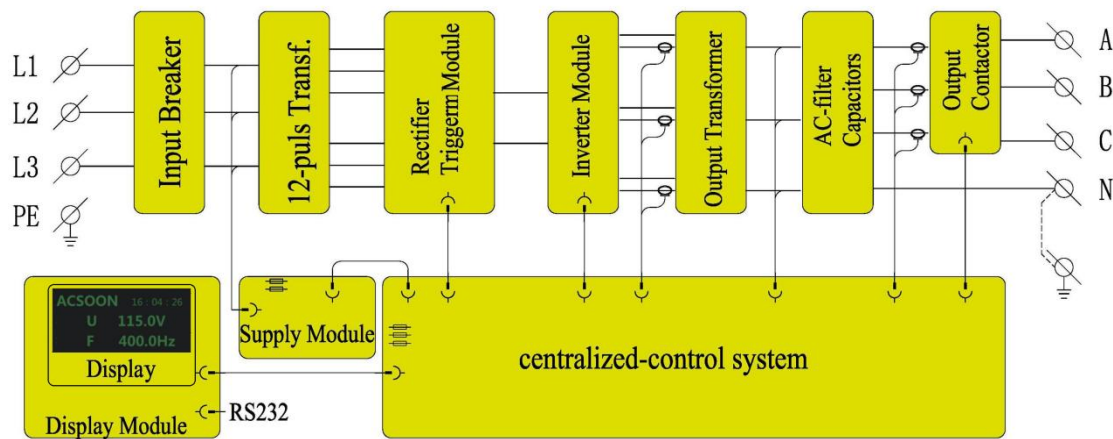
INPUT	
Number of Phases	Three Phase
Nominal Input Voltage	208, 380V, 400V, 415V, 440V, 480V / Three Phase
Voltage Tolerance	± 15%
Nominal Frequency	50Hz / 60Hz
Frequency Tolerance	40Hz - 70Hz
Input Power Factor	≥0.9
OUTPUT	
Number of Phases	Three Phase Four Wire
Nominal Output Voltage	115V, 120V / Single Phase ; 200, 208V / Three Phase
Voltage Adjustable	100-130V (L-N)
Nominal Output Frequency 400Hz	
Frequency Stability	+/-0.01%FS
Voltage Regulation	+/-1% FS
Voltage Stability	+/-1%FS
Digital Display	VFD digital display: Frequency, Voltage, Current, Power Factor / Power (watt), Time Setting
Voltage Compensation	Auto 0-10V
Distortion	VTHD <2%, Pure sine wave output
Phase Angle	120° ± 1° for balanced load, 120° ± 2° for 30% unbalanced load
Overall Efficiency	≥ 93%
Crest Factor	1.414 ±3%
Circuit Modulation	SPWM, 12 Pulse Rectification
Protection	Complete Over current, over load, over heat, short circuit, Protections and alarm.
Overload Capacity	125% for 10 min, 150% for 60s and 200% for 30s
IP Class	IP54
MTBF	50,000 Hrs
MTTR	<30Min
Humidity	10-95%
Noise	Less than 65dB within 1 meter
Operating Temperature	-20 to 50°C
Standards	GJB572A-2006, GJB181A-2003, ISO6858, MIL-STD-704F, EN61000

Models Selection Designate

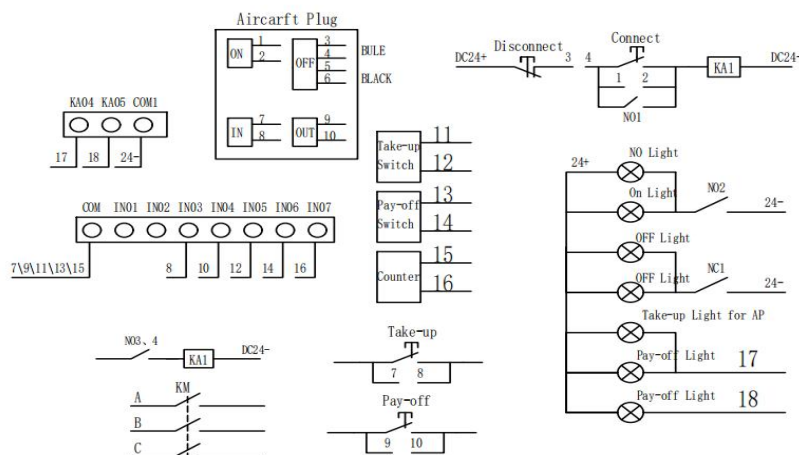
The ACSOON® GPU400L series power supply model designation are shown below



Circuit Block Diagram



Cable Reel Diagram



The Definition of AP:

1. PE;
2. +24v;
3. -24v;
4. A1;
5. B1;
- (4, 5 for RS485)
6. 7: Self-locking;
8. COM
9. Start
10. Stop;
11. Run Light;
12. Fault Light;
13. +24V;
14. Close;
15. COM;
16. On Light;
17. Off Light;
18. COM;
19. Forward;
20. Reverse;
21. -24V;
22. Forward Light;
23. Reverse Light;
29. 30: E-Stop;
24. 25. 26. 27. 28. 31
- None.

The Definition of Reel control cables:

1. +24v;
2. +24v;
3. Connect;
4. Disconnect;
5. Off Light;
6. On Light;
7. E;
8. F;
- (Aircraft locking plate signal);
17. 18. Take-up/Pay-off Light;
21. Take-up/Pay-off com;
22. Take-up;
23. Pay-off.

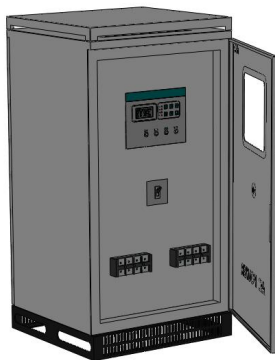
BRIDGE-MOUNTED UNIT STATIC FREQUENCY CONVERTER

GPU400L SERIES

ACSOON POWER SOLUTIONS' PROVIDER



TYPE A



TYPE A



TYPE B



TYPE B

TYPE A - 30KVA / 45KVA

TYPE A - 60KVA / 90KVA

TYPE B - 90KVA

TYPE B - 90KVA

Length - 650mm

Length - 750mm

Length - 1545mm

Length - 1830mm

Width - 700mm

Width - 800mm

Width - 980mm

Width - 980mm

Height - 1355mm

Height - 1495mm

Height - 900mm

Height - 1355mm